

# EUROPEAN PATENT OFFICE

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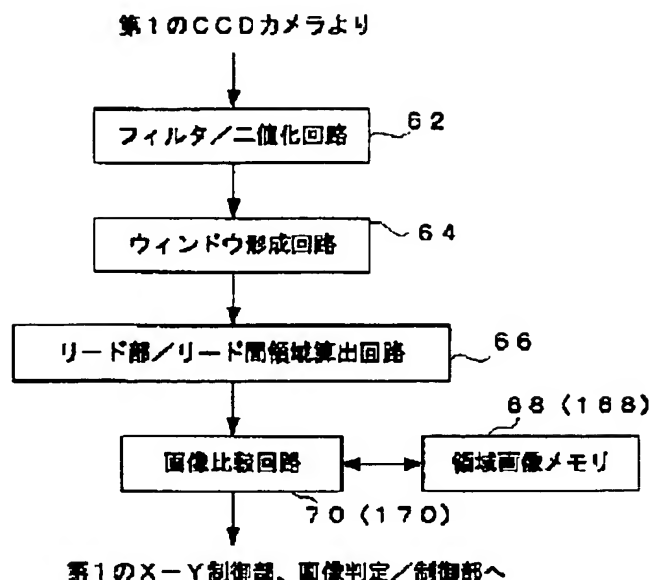
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APPLICANT : NIPPON INTER CONNECTION  
SYSTEMS KK;

INVENTOR : NAKAMORI YUKIO;

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TITLE : APPARATUS AND METHOD FOR  
DETECTING FAULT OF TAPE  
CARRIER



ABSTRACT : PROBLEM TO BE SOLVED: To accurately and surely detect a fault occurring between leads by generating a window having a predetermined width and sequentially moving in the length direction of the leads, and comparing the areal value of a lead region with a reference value for the lead.

SOLUTION: An inter-leads region calculator 66 of an image measuring part calculates areas of regions between leads. After the calculation, an image comparator 70 compares the areal value of these regions with a predetermined reference value stored in a region image memory 68, and decides normal or abnormal of the lead region. Further, a residual copper can be detected by the comparison, and the abnormality of the region and a position of the copper are temporarily stored in a predetermined area of the memory 68. Then, more detailed image of the predetermined partial region in a frame is obtained by a second CCD camera. A fault measuring part more precisely inspects than the measuring unit. An image deciding/controller receives data from the image measuring unit and the defect measuring part, and finally decides the presence or absence of the lead defect in the frame. Then, the fault of the decided lead is punched at the frame by a punch driver.

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